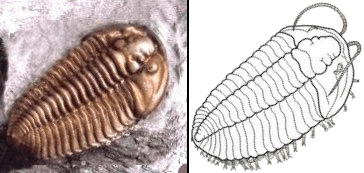
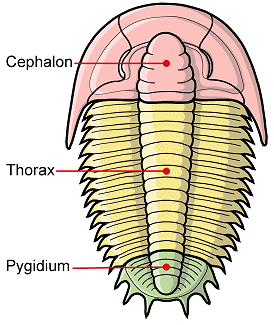
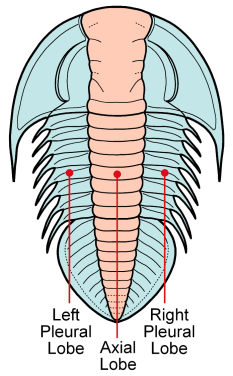
Trilobite Reading

(Honors/Red/Orange)

Trilobites are remarkable, hard-shelled, segmented creatures that existed over [520 million years ago](http://www.trilobites.info/firsttrilos.htm) in the Earth's ancient seas. They went extinct before dinosaurs even came into existence, and are one of the key signature creatures of the [Paleozoic Era](http://www.trilobites.info/geotime.htm" \t "geo), the first era to exhibit a proliferation of the [complex life-forms](http://www.trilobites.info/triloclass.htm" \t "class) that established the foundation of life as it is today. Although dinosaurs are the most well known fossil animals, trilobites are also a favorite among those familiar with Paleontology (the study of the development of life on Earth), and are found in the rocks of [all continents](http://www.trilobites.info/localities.htm" \t "loc_blank).



ANCIENT ARTHROPODS   
Trilobites were among the early [arthropods](http://www.trilobites.info/triloclass.htm), a phylum of hard-shelled creatures with multiple body segments and jointed legs (although the legs, antennae and other finer structures of trilobites only rarely are preserved). They constitute an extinct class of arthropods, the Trilobita, made up of [ten orders](http://www.trilobites.info/triloclass.htm" \l "orders" \t "_blank), over [150 families](http://www.trilobites.info/trisystem.htm" \t "fam), about [5,000 genera](http://www.trilobites.info/genera.htm), and over 20,000 described species. New species of trilobites are unearthed and described every year. This makes trilobites the single most diverse class of extinct organisms, and within the generalized [body plan](http://www.trilobites.info/trilobite.htm#plan) of trilobites there was a great deal of diversity of size and form. The smallest known trilobite species is under a millimeter long, while the [largest](http://www.trilobites.info/lgtrilos.htm" \t "lg_blank) include species from 30 to over 70 cm in length (roughly a foot to over two feet long!). With such a diversity of species and sizes, speculations on the [ecology of trilobites](http://www.trilobites.info/triloecology.htm) includes planktonic, swimming, and crawling forms, and we can presume they filled a varied set of [trophic (feeding) niches](http://www.trilobites.info/feeding.htm), although perhaps mostly as detritivores, predators, or scavengers. Most trilobites are about an inch long, and part of their appeal is that you can hold and examine an entire fossil animal and turn it about in your hand. Try that with your average dinosaur!



THE TRILOBITE BODY PLAN

Whatever their size, all trilobite fossils have a similar body plan, being made up of three main body parts: a [cephalon](http://www.trilobites.info/cephalon.htm" \t "_blank) (head), a segmented [thorax](http://www.trilobites.info/thorax.htm" \t "_blank), and a [pygidium](http://www.trilobites.info/pygyterms.htm" \t "_blank) (tail piece) as shown at left. However, the name "trilobite," which means "three lobed," is not in reference to those three body parts mentioned above, but to the fact that all trilobites bear a long central axial lobe, flanked on each side by right and left pleural lobes (pleura = side, rib). These three lobes that run from the cephalon to the pygidium are what give trilobites their name, and are common to all trilobites despite their great diversity of size and form. You can examine the trilobite body plan in more detail using the links on the navigation bar below, or link directly to a page describing trilobite [major features](http://www.trilobites.info/trilomajor.htm" \t "_blank).